IN THE CLAIMS

Please cancel claims 1, 5, 9, 14, 24, and 26-27.

1. Cancel

2. (Currently Amended) A method of forming an oxide film including:

placing a substrate in a deposition chamber;

decomposing a silicon source gas and an oxidation source gas using a thermal energy source in said deposition chamber; and

forming a silicon oxide film above said substrate wherein a total pressure for said deposition chamber is maintained in the range of 50 to 350 Torr during deposition process,

~~A method as in claim 1~~ wherein said silicon source gas is selected from the ~~a~~ group consisting of silane, disilane, methylsilane, and halogenated silanes.

3. (Currently Amended) A method as in claim 2 ~~1~~ further including mixing said silicon source gas with said oxidation source gas prior to said decomposing.

4. (Currently Amended) A method as in claim 2 ~~1~~ wherein said oxidation source gas is selected from the ~~a~~ group consisting of nitrous oxide, ozone, and tetraethoxysilane (TEOS).

5. Cancel.

6. (Currently Amended) A method of forming an oxide film including:

placing a substrate in a single deposition chamber;

decomposing a silicon source gas and an oxidation source gas using a thermal energy source in said deposition chamber; and

forming a silicon oxide film above said substrate in said deposition chamber wherein a flow ratio for said silicon source gas and said oxidation source gas is in the range of 1:50 to 1:10000,

~~A method as in claim 5~~ wherein said silicon source gas is selected from the ~~a~~ group consisting of silane, disilane, methylsilane, and halogenated silanes.

7. (Currently Amended) A method as in claim 6 ~~5~~ further including ~~reacting~~ mixing said silicon source gas with said oxidation source gas prior to said decomposing.

8. (Currently Amended) A method as in claim 6 ~~5~~ wherein said oxidation source gas is selected from ~~a~~ the group consisting of nitrous oxide, ozone, and TEOS.

9. Cancel.

10. (Currently Amended) A method as in claim ~~9~~ 11 wherein same source gases as said silicon source gas and said oxidation source gas are used for said thermal annealing process.

11. (Currently Amended) A method of forming an oxide film including:

placing a substrate in a single wafer deposition chamber;

decomposing a silicon source gas and an oxidation source gas using a thermal energy source in said deposition chamber;

forming a silicon oxide film above said substrate in said deposition chamber; and

annealing said substrate using a thermal annealing process,

~~A method as in claim 9~~ wherein said silicon source gas is selected from ~~a~~ the group consisting of silane, disilane, methylsilane, and halogenated silanes.

12. (Currently Amended) A method as in claim ~~9~~ 11 further including mixing said silicon source gas with said oxidation source gas prior to said decomposing.

13. (Currently Amended) A method as in claim ~~9~~ 11 wherein said oxidation source gas is selected from a group consisting of nitrous oxide, ozone, and TEOS.

14. Cancel.

15. (Currently Amended) A method as in claim ~~14~~ 16 wherein same source gases as said silicon source gas and said oxidation source gas are used for said thermal annealing process.

16. (Currently Amended) A method of forming an oxide film including:

placing a substrate in a deposition chamber;

decomposing a silicon source gas and an oxidation source gas using a thermal energy source in said deposition chamber;

forming a silicon oxide film above said substrate in said deposition chamber, wherein a total pressure for said deposition chamber is maintained in the range of 50 to 350 Torr and wherein a ratio for said silicon source gas and said oxidation source gas is in the range of 1:50 to 1:10000 during deposition process; and

annealing said substrate using a thermal annealing process,

~~A method as in claim 14~~ wherein said silicon source gas is selected from ~~a~~ the group of consisting of silane, disilane, methylsilane, and halogenated silanes.

17. (Currently Amended) A method as in claim ~~14~~ 16 further including mixing said silicon source gas with said oxidation source gas prior to said decomposing.

18. (Currently Amended) A method as in claim ~~14~~ 16 wherein said oxidation source gas is any one of nitrous oxide, ozone, and TEOS.

19. (Currently amended)A method of forming a silicon oxynitride film including:

placing a substrate in a deposition chamber and obtaining a desired process temperature and a desired process pressure;

flowing an oxidation source gas into said deposition chamber at a first desired flow rate for a first predetermined amount of time after said desired process temperature and said desired process pressure are obtained;

diverting a silicon source gas away from said deposition chamber, said diverting having said silicon source gas ~~flows~~ flow at a second desired flow rate and said diverting occurring before forming said silicon oxynitride film;

stopping said diverting and flowing said silicon source gas at said second desired flow rate into said deposition chamber;

decomposing said silicon source gas and said oxidation source gas in said deposition chamber using a thermal energy source;

forming said silicon oxynitride film above said substrate wherein said desired process pressure is between of 50 to 350 Torr, wherein said desired process temperature is between 400°C to 800°C, and wherein a flow ratio for said silicon source gas and said oxidation source gas is between 1:50 to 1:10000;

wherein said silicon source gas is mixed with a nitridation source gas;

terminating said silicon source gas into said deposition chamber while maintaining said flowing of said oxidation source gas in said deposition chamber for a second predetermined amount of time; and

purging said deposition chamber with a cleaning gas.

20. (Currently Amended) A method as in claim 19 wherein said silicon source gas is selected from ~~a~~ the group consisting of silane, disilane, methylsilane, and halogenated silanes.

21. A method as in claim 19 further including mixing said silicon source gas with said oxidation source gas prior to said forming of said silicon oxynitride film.

22. (Currently Amended) A method as in claim 19 wherein said oxidation source gas is selected from ~~a~~ the group consisting of nitrous oxide, ozone, and TEOS.

23. (Currently Amended) A method as in claim 19 wherein said nitrogen source gas is selected from ~~a~~ the group consisting of an ammonium source gas, ammonia, and hydrazine.

24. Cancel

25. (Currently amended) A process of forming an oxide film including:

depositing a substrate in a deposition chamber, said deposition chamber designed such that thermal low-pressure chemical vapor deposition process is utilized to form said oxide film on said substrate

said deposition chamber further includes a water passage to create a cold wall deposition chamber, a resistively heated heater pocket to heat up said substrate wherein said substrate is horizontally placed on said heater pocket and a gas distribution point for ~~injection~~ injecting reactant gases into said deposition chamber;

flowing a silicon source gas and an oxidation source gas into said distribution point wherein said distribution point is located above said resistively heated heater pocket;

decomposing said silicon source gas and said oxidation source gas using a thermal energy source from said deposition chamber; and

forming said oxide film on said substrate.

26-27. Cancel

Please add claims 28-31

28. (New) A method as in claim 25 wherein said silicon source gas is selected from the group consisting of silane, disilane, methylsilane, and halogenated silanes.

29. (New) A method as in claim 25 further including mixing said silicon source gas with said oxidation source gas prior to said forming of said silicon oxynitride film.

30. (New) A method as in claim 25 wherein said oxidation source gas is selected from the group consisting of nitrous oxide, ozone, and TEOS.

31. (New) A method as in claim 25 wherein said nitrogen source gas is selected from the group consisting of an ammonium source gas, ammonia, and hydrazine.